

4) All fees collected under this Rule shall be deposited in the general fund.

RESPONSE

A fee of two thousand five hundred dollars (\$2,500) was submitted as the permit fee required under this Section with the permit revision application.

Approximately 5,120 acres have been affected by mining and related activities, in those areas overlying active or completed longwall panels or other mining areas within the Southwestern and the Eastern Mining Districts. The total affected area for all surface disturbance and mined and permitted future mining areas is approximately 13,849 acres. This area includes those areas re-disturbed by subsidence, and the minor amount of new subsidence (approximately 149 acres) associated with mining of the Wolf Creek Coal Seam. The total of Life-of-Mine permit area, as defined by the current permit boundary, encompasses a total of approximately 22,647 acres, as shown on Maps 1 and 2. The current permit area acreage reflects previous additions to the permit area of 1,013 acres (TR99-33) the more recent reduction in acreage of approximately 1,320 acres due to a permit boundary modification (TR05-51), and Permit Boundary modifications (200 acres) associated with planned development and mining of the Wolf Creek Reserves (PR15-11 and TR18-92). The total disturbance area is approximately 805.2 acres.

NORTHERN MINING DISTRICT (Panels 12-Right through 24-Right)

The Northern Mining District added approximately 4,170 acres to the affected acreage category (Map 23). Changes in the Life of Mine Permit Boundary to accommodate mining activities in the Northern Mining District (TR99-33) and Wolf Creek Reserve added approximately 238 acres and 160 acres to the Permit Area, respectively.

WESTERN MINING DISTRICT (Panels 12- through 17-Left, and 19- through 20-Left)

The Western Mining District will add approximately 3,150 acres to the affected acreage category (Map 23). Changes in the Life-of-Mine Permit Boundary to accommodate mining activities in the Western Mining District (TR99-33) added approximately 775 acres to the Permit Area.

calculating the buoyancy of the liner, and adding water to the capped liner column, as needed, the liner is easily and safely lowered into position. Once the liner is in place, a nominal 9-inch thick grout seal will be pumped between the strata and liner. The grouted steel liner will serve to isolate the Twentymile Sandstone from the Wadge Overburden. As previously noted, TCC plans to pressure grout the Twentymile Sandstone to minimize seepage to the shaft. This will help assure that, after final closure, groundwater from this unit will be confined and not seep down the inside of the shaft.

Upon completion of shaft drilling and steel liner installation for both shafts, the cuttings pit will be dewatered. Excess water will be hauled to the Area 1 Pit, and the remainder will be allowed to evaporate. After dewatering the cuttings pit and allowing the cuttings to consolidate and dry-out, the collection pit and cutting materials will be covered with stockpiled materials from the shaft collar excavation, graded and revegetated with a temporary cover. A sign(s) will be posted designating the temporary mine development waste pit. The cuttings and shaft collar excavation materials will be utilized to re-fill the shafts during eventual reclamation of the shaft installation.

As shown on Map 23, additional entries will be driven from the 18-Left gate-road to the north to connect with the two ventilation shafts. The entries will be driven in the same manner as is used in TCC's development work, i.e. continuous miners and shuttle cars.

Following completion of shaft boring and casing operations and removal of the drilling equipment from the site, emergency hoist equipment, consisting of an escape capsule, hoist derrick, hoist drive unit, control equipment and 18 x 24 foot pre-fabricated metal hoist house, and a pre-fabricated propane-fired shaft heaters and ducting will be erected/installed on the previously constructed intake shaft concrete pad. The shaft heaters will be connected to a propane supply tank, mounted on prefabricated concrete saddles, and a buried electrical cable. A chain-link security fence with a locked gate will be constructed to enclose the intake shaft and emergency hoist installation. Similarly, a fan enclosure (fan shroud), silencer, and electrical control building will be erected on the previously constructed exhaust shaft concrete pad, and the fan, fan drive motor, and electrical control, monitoring, and communication systems will be installed. It is presently anticipated that the 400 hp, 90,000 cubic-foot per minute Robinson Fan and associated equipment will be relocated to the 18-Left Ventilation Shaft from the EMD Ventilation Shaft location. In order to comply with new Mine Atmosphere Control (MAC) regulations, the cased nitrogen injection borehole will be connected to one or more manifolded pipe systems underground which will connect to sealed gob areas. At the surface, an 8-foot diameter culvert manhole may be installed around the cased borehole(s) as a well-head, with appropriate grounding and lightning protection to meet MSHA requirements. The fixed pipeline(s) will connect at the surface to a portable skid-mounted nitrogen generator, which will operate in conjunction with associated portable compressors and controls. Required power for this installation will be provided by dropline from the existing 18-Left Substation.

As part of the 18-Left Shaft Project, TCC will complete a 14.75-inch diameter borehole to a depth of approximately 1,360 feet. The borehole will be completed with a 13-inch diameter steel casing, a 6.625-inch and two 5.0-inch diameter pipes will be installed within the casing, and the annulus will be grouted between the borehole and casing. It is anticipated that the 6.625-inch pipe will be used as a mine dewatering borehole, and the two 5.0-inch pipes for power drops or communication lines.

Water from the WMD will be collected in a series of sumps, transferred to a pump station at the bottom of the 18-Left Shaft, and pumped to the surface by a 320 HP high-capacity submersible pump, at a maximum rate of approximately 700 gpm. A pipeline running approximately 8,200 feet from the 18-Left Shaft site to the southeast, will connect to the existing Fish Creek Mine Water Transfer Pipeline just to the east of the Fish Creek Water Treatment Facility. In 2020 a second pipeline running approximately 5,100 feet was installed to dewater from the 16LT borehole and transfer the water to the 18LT transfer pipeline to be able to dewater more of the WMD. Both Pipelines will be a 12-inch HDPE pipeline with thermally-welded joints, buried below the frostline at a depth of approximately 5 feet. The 18LT pipeline will be installed under Routt County Road 27 by boring or jacking the pipeline under the road, and a crossing of Fish Creek will be either trenched through the creek during the winter low-flow period, or bored under the creek. Permitting for pipeline installation includes approvals from the U.S. Army Corps of Engineers (Nationwide Permit 12), CDPHE-Water Quality Control Division (Construction Dewatering Permit), notification of the Colorado Division of Water Resources, and a County Utility Install Right-of-Way Permit, as appropriate.

Pipeline construction will involve placement of sediment control materials (straw wattles or silt fence) downslope of the disturbance at any location where the pipeline corridor is within 50 feet of a Stream Buffer Zone or non-qualifying ephemeral drainage; removal and windrowing of available soil material (total soil material volume for the pipeline project is estimated at 12,150 cy) to one side of the 40 foot pipeline construction corridor; excavation of the pipeline trench using a track-hoe, with temporary placement of the excavated material on the opposite side of the trench; placement, connection, and bedding of the pipe; backfilling and compaction of the excavated material around the pipe; re-spreading of the soil material; and re-seeding using the standard rangeland seed mixture. Where the pipeline is installed by boring, boring pits will be excavated within the pipeline construction corridor for the boring equipment and pipe handling. Because the soil materials will be replaced immediately after pipeline placement, as construction advances, stabilization measures are not necessary.

Where the pipeline crosses under Routt County Road 27, boring or jacking pits will be excavated on the edges of the road right-of-way, and the pipeline will be bored or jacked under the road. The Fish Creek crossing has been located to take advantage of a deeply incised stream channel, minimizing potential impacts to the narrow riparian fringe which exists along this section of the creek. Because pipeline installation activities will occur within Stream Buffer Zones, TCC is requesting a variance from the Stream Buffer Zone requirements, consistent with the applicable provisions of Rule 4.05.18. To the extent feasible, the trenched crossing will be completed during the winter low-flow period. A temporary upstream flow barrier will be established in the channel, and normal streamflows will be transferred around the work area by pumping from the resulting pool above this upstream barrier to well below the crossing work area. Pumping capacity will be approximately 10 cfs (greater than maximum measured historic flows for the construction timeframe) to assure that there is no diminution of flow, and back-up pumping capacity will be provided in the crossing construction area to address any leakage or underflow. Details of the Fish Creek pipeline crossing are presented in Exhibit 49R, 18LT Ventilation Shaft Installation – Design Drawings. If the Fish Creek pipeline crossing is completed by boring the pipeline under the creek, the surface protective measures, as outlined above, will not be necessary.

Protective measures (BMP's) at the crossing location will include placement of stream buffer zone markers at any point where the pipeline corridors are within 50 feet of the stream buffer zone prior to any activity; placement of silt fence or anchored straw bales at least 50 feet downstream to catch any sediment released prior to initiation of work; placement of sediment control materials (straw wattles or silt fence) around the entire side and near stream perimeters of the pipeline excavation and stockpile disturbance areas on both sides of the stream; restrictions on storage or transfers of petroleum products within the buffer zone, and reclamation of the affected areas immediately following completion of pipeline installation. These measures should be effective in assuring compliance with applicable provisions of Rule 4.05.18 (1)(a) through (c). Construction and sediment control details are shown by the design drawings in Exhibit 49R. Manholes, consisting of 8-foot diameter x 10-foot high CMP culverts, fitted with locking lids and access ladders, will be installed at either end of the pipeline for access to pipeline valving.

A second 14.75-inch diameter Utility Borehole will be completed to a depth of approximately 1,390 feet. A 60-foot deep, 16-inch diameter surface borehole and surface casing will first be completed to support subsequent drilling operations. The Utility Borehole will be completed with a 13-inch diameter grouted steel casing, an 8.625-inch and a 4.5-inch diameter pipes will be installed within the casing, and the annulus will be grouted between the borehole and casing. It is anticipated that the 8.625-inch pipe will be used as a rock-dust drop, and the 4.5-inch pipe for compressed-air. The additional 18LT Rock-Dust Tank Installation will consist of a new rock-dust tank, which will be mounted on four poured concrete piers; a connection to the new borehole; required electrical and control equipment, that will tie-in to the existing 18LT Substation; and a dust collection system. The MCC Building installation includes a 40 x 40 foot concrete pad and steel building and an 8 x 48 foot exterior concrete pad. In order to accommodate the three large air compressors necessary to meet mine compressed air requirements, the exterior concrete pad will be extended to 24 x 56 feet. Fourteen, 12-inch diameter holes will be bored approximately 20 feet to bedrock, and surface materials in the pad extension footprint will be over-excavated, replaced, and re-compacted. Reinforced concrete piers and pad will be bored to support the compressors and a pre-fabricated steel building will be constructed on the extended pad to enclose the compressor installation.

Following commissioning, the shaft pad site, access road, and pipeline corridor will be cleaned-up and surface areas graded and stabilized by seeding with the temporary seed mixture. When these facilities are no longer needed to support ongoing or future mining and related operations, reclamation will involve removal of surface structures and facilities, demolition of concrete foundations and pads, disposal of concrete debris in the shafts, replacement of

Secondary Substation 12, located about a half mile north of Substation 11 on the 6MN Road, converts incoming power from 69KV to 4,160V and distributes it to the associated NW Mains Ventilation Fan installation. Substation 12 is approximately 50 x 30 feet, and consists of a fenced transformer pad, transformer, associated electrical equipment, and connecting power distribution lines.

Secondary Substation 13, located about a half mile north of Substation 12 in the 6MN facilities area, converts incoming power from 69KV to 4,160V and distributes it to the 6MN air compressor. Two transformers convert the 69KV power to 12,470V and transfer power underground by shielded cable through two separate power-drop boreholes. Another transformer converts the 4,160V power to 480V and distributes it to the 6MN Emergency Escape Hoist by overhead powerline. Substation 13 is approximately 120 x 100 feet, and consists of four transformers within a fenced enclosure, associated electrical equipment, and connecting power distribution lines.

YVEA also has a primary substation (Sandstones Substation), located adjacent to Routt County Road 27, that supplies 69KV power to the new Washplant II (addressed under the discussion of the Washplant II facilities) and the adjacent TCC primary Substation 4. Substation 4 in turn converts the 69KV to 4,160V and feeds it to TCC's Coal Handling Systems secondary Substation 5, Washplant I, the Batch-Weigh Loadout, and the Pond A and Area 1 Pit pumping installations. Substation 4 is approximately 30 x 20 feet, and consists of a fenced transformer pad, transformers, associated electrical equipment, and connecting power distribution lines. The powerline from Substation 4 to Washplant I is an overhead line (5 poles) to Haulroad B, and is then buried from the north edge of the road into the plant. Distribution lines with poles on 300-800 foot centers supply power to the pump stations located at Pond A and the Area 1 Pit. Substation 5, located just east of the Batch-Weigh Coal Stockpile, converts incoming power from 4,160V to 480V for distribution to the Coal Handling System. Substation 5 is approximately 50 x 30 feet, and consists of a fenced transformer pad, transformers, associated electrical equipment, and connecting power distribution lines.

Another YVEA substation (Substation 10 - Lieske Substation), located just northeast of the intersection of Routt County Roads 33 and 179, supplies 12,470V power to TCC's Eastern Mining District (EMD) Ventilation Fan Installation. A distribution line (28 poles) from a switch box at the Mine 3 (Middle Creek) Warehouse runs west approximately 8,200 feet. This substation and powerline are shown on Figure 16C.

Primary Substation 14, located at the 18-Left Ventilation Shaft site, is connected to a separate 69KV powerline and converts incoming power from 69KV to 4,160V and 440V, and distributes it to the 18LT Mine Ventilation Fan, shaft heater and emergency escape hoist. Substation 14 is approximately 80 x 125 feet, and consists of several transformers within a fenced enclosure, associated electrical equipment, grounding field, and connecting power distribution lines. A 5,650 foot distribution line was added from the 69KV transformer to the 16LT pad for the dewatering pump and controls.

Powerpole installation involves the use of existing roads or limited overland access to the individual pole locations, localized shallow auger drilling to set each pole, pole placement and anchoring, and distribution of the limited drill cuttings over the small area surrounding each pole. Given the very limited temporary disturbance involved, TCC does not propose topsoil recovery or reseedling for the individual powerpole locations. It should be noted that pole locations have been selected specifically to avoid stream buffer zones or other sensitive areas. Constriction of the distribution lines involves the use of existing roads or limited overland access by a bucket truck and cable truck to install cross-bars, insulators and conductors. All cross-bars will have installed raptor deterrents, consistent with approved raptor protection guidelines. Powerline installation will not affect existing drainage systems, given the minimal surface disturbance and very temporary nature of the activities involved.

A typical grounding configuration for the identified substations is a grid of conductive cables (typically welded in 10 foot x 10 foot squares under the whole pad and extending 10 feet from the perimeter of the substation fence and buried to a depth of 18 to 24 inches. Supplemental grounding for pole-mounted transformer or primary distribution powerlines is provided by two or more 50-foot wires, buried to a depth of 5 feet, extending, to the sides of the poles. The associated disturbance for the grounding fields is minimal and requires no additional sediment control.

Locations of the substations, transformers, and power distribution lines are shown on Maps 39 (Substation and Powerline Locations) and 24 (Surface Facilities). There are also a number of minor electrical installations, briefly described as follows:

water to the surface facilities. A second centrifugal pump delivers water to the mine for dust control and fire protection. A second source is a water-line, which runs from a Colorado Yampa Coal Company manhole station 220 feet to a borehole approximately 170 feet deep, constructed of 4- inch PCV pipe, as shown on Map 24, Surface Facilities. This line will provide water to the TC/CYCC water system.

TC proposes to install an additional waterline between CYCC and TC. The line will be installed between CYCC's wash bay and TC's pumphouse. The approximate location of the water line is shown on Map 24, Surface Facilities. A 40-foot corridor will be disturbed during installation. TC is adding an 8-inch HDPE, 400-foot long waterline between Location 6 Inspection manhole and the freshwater borehole. A 40-foot corridor will be disturbed during installation.

Mine Water Discharge and Recycle System (Revised - TR09-70, TR10-73, TR16-84, TR20-95, MR07-216, MR08-230, MR08-231, MR15-288, MR16-295, MR16-299)

Transfer of mine water to the surface can occur at six locations, the Portal/0-Entry Borehole/Pond D (Sites 109 (inactive)/005), the Fish Creek Boreholes (Site 115), the 10RT Boreholes (Site 001 under the General Coal Permit), the 18-Left Shaft Site and 16-Left Borehole (connects to Fish Creek Pipeline), and the 19-Right Borehole and 5MN Boreholes (both connect to 6MN Mine Water Reservoir). Water discharged from the Portal and 0-Entry Borehole (general mine discharge) is routed through the Area 1 Pit Mine Water Storage Reservoir, with discharge to Sedimentation Pond D prior to discharging to Foidel Creek at Site 005. Mine discharge water from the Fish Creek Boreholes (SWMD) may be treated prior to transfer to the mine water system or discharge to Fish Creek at Site 115, or may be pumped back to the Area 1 Pit for use in the Washplant or discharge through Pond D and Site 005. A treatment system solely for the 10RT (EMD) Dewatering Boreholes, the Passive Treatment System was constructed in 2019. The water can be pumped from this site directly to the mine water system, to the 6MN Mine Water Storage Reservoir and 6MN Million-Gallon Tank (connected to the mine water system), to the Passive Treatment System, back to the Area 1 Pit for use in the Washplant or discharge through Pond D and Site 005, or directly discharged to Foidel Creek at Site 001, under the Coal General Permit. Mine water can also be transferred from the 16-Left Borehole or 18-Left Shaft Site to the existing pipeline running from the Fish Creek Water Treatment Facility to the Area 1 Pit. From The Area 1 Pit, this water can then be transferred to any of the storage or use points previously identified. Mine water from the 19-Right Dewatering Borehole and 5MN Borehole is transferred to the 6MN Mine Water Storage Reservoir, where it can be routed back to the mine water system through the 6MN water borehole. Water from the 5MN Borehole can also be routed through the passive treatment system for re-use or discharge from the 6MN Reservoir.

In addition to the primary mine water discharge locations, there is a very limited potential for production mine water to discharge at the Northwest Mains Ventilation Shaft through a pressure relief/accumulator pipe for the production mine water system. Although discharge occurred in mid-2005 due to catastrophic failure of both the primary and back-up pressure relief valves, TC has taken positive steps to assure that this site will not discharge in the future.

TC previously constructed a mine water pipeline from the Fish Creek Water Treatment Facility that ties into the Barricade Chamber/FCM-2 Boreholes and 10RT Water Transfer Pipeline, and has more recently constructed additional pipelines tying these facilities to the 6MN Mine Water Storage Reservoir and Million-Gallon Tank and the Area 1 Pit Storage Reservoir. In order to dewater the recently completed Northern Mining District and the new Western Mining District, TC has, or proposes to complete additional pipelines from the 19-Right Mine Dewatering Borehole, and the 18-Left Ventilation Shaft Installation, the secondary 10RT Water Transfer Pipeline parallel to the existing 10RT to the Barricade Chamber pipeline and most recently from 16-Left borehole to the 18-Left Shaft . The locations of these pipelines and associated facilities are shown on Map 24, Surface Facilities. The water pipeline network enhances TC's ability move either treated or untreated mine water between mine areas and the ability to recycle mine water, thereby minimizing the volume of supplemental supply water needed to meet mine usage.

Portal and 0-Entry Borehole and Transfer Pipeline (MR08-230, MR08-231) – Water from the mine water system can be discharged from the Mine Portal, where it flows by gravity or can be conveyed by temporary pipeline to Ditch D-2 and the Portal Sump. A transfer pump in the Portal Sump moves the water through a buried HDPE transfer pipeline to the Area 1 Pit Mine Water Storage Reservoir. Water can also be transferred from the mine water system to the Area 1 Pit through the 0-Entry Borehole and pipeline. The 0-Entry Borehole is a 12-inch (maximum) diameter steel-cased borehole extending from the 0-Entry Fan Pad (location shown on the Surface

Water Storage Reservoir – Design Drawings. Pipeline trenching operations were conducted using a track-hoe with the maximum working area assumed to be 40 feet wide. Approximately 7 acres were disturbed in construction of the original water line, with another 7.1 acres disturbed by the pipeline. Pipeline construction involved removing and temporarily windrowing soil materials along the edge of the pipeline corridor; trenching and temporary placement of the excavated material on the opposite side of the trench; bedding, placement, connection, and testing of the pipeline; controlled backfilling and compaction of the excavated material over the pipeline; and replacement, grading, and reseeded of the soil material over pipeline disturbance areas. Access manholes were established along the pipeline route for inspection and maintenance purposes. Soil materials were replaced following completion of pipeline installation. Reseeding of the disturbed areas will be completed during the first appropriate planting period following soil material replacement.

16LT and 18LT Mine Water Transfer Pipeline (TR09-70, TR20-95)

The 18-Left Mine Water Transfer Pipeline (18LT Pipeline) will originate from a permitted mine dewatering borehole at the 18-Left Shaft location, and extend approximately 8,200 feet to the southeast, connecting to the existing Fish Creek Mine Water Transfer Pipeline just to the east of the Fish Creek Water Treatment Facility. The 16 Left Mine Water Transfer Pipeline (16LT Pipeline) will originate from the 16LT Utility borehole at the 16LT pad and extend approximately 5,700 feet to the northeast to the 18LT mine water transfer pipeline at the 18LT Shaft. Both pipelines will be a 12-inch HDPE pipeline with thermally welded joints, buried below the frostline at a depth of approximately 5 feet. The 18LT pipeline will be installed under Routt County Road 27 by boring the pipeline under the road, and a crossing of Fish Creek will be either trenched through, or bored under the creek. Manholes, consisting of 8-foot diameter x 10-foot high CMP culverts, fitted with locking lids and access ladders, will be installed at both ends of each pipeline for access to pipeline valving.

Pipeline construction will involve placement of sediment control materials (straw wattles or silt fence) downslope of the disturbance at any location where the pipeline corridor is within 50 feet of a Stream Buffer Zone or non-qualifying ephemeral drainage; removal and windrowing of available soil material to one side of the 40 foot pipeline construction corridor; excavation of the pipeline trench, with temporary placement of the excavated material on the opposite side of the trench; placement, connection, and bedding of the pipe; backfilling and compaction of the excavated material around the pipe; re-spreading of the soil material; and re-seeding using the standard rangeland seed mixture. Because the soil materials will be replaced immediately after pipeline placement, as construction advances, stabilization measures are not necessary. Where the 18LT pipeline crosses under Routt County Road 27, boring or jacking pits will be excavated and the pipeline will be bored or jacked under the road. The Fish Creek crossing has been located to take advantage of a deeply incised stream channel, minimizing potential impacts to the narrow riparian fringe which exists along this section of the creek. To the extent feasible, the trenched crossing will be completed during the winter low-flow period. A temporary upstream flow barrier will be established in the channel, and normal streamflows will be transferred around the work area by pumping from the resulting pool above this upstream barrier to well below the crossing work area. If the Fish Creek pipeline crossing is completed by boring the pipeline under the creek, the surface protective measures, as outlined above, will not be necessary.

Specific protective measures (BMP's) will be used at the crossing location including placement of stream buffer zone markers, silt fence or anchored straw bales at least 50 feet downstream to catch any sediment; placement of sediment control materials (straw wattles or silt fence) around the entire side and near stream perimeters of the boring/jacking pits; restrictions on storage or transfers of petroleum products within the buffer zone, and reclamation of the affected areas immediately following completion of pipeline installation. Soil materials will be replaced following completion of pipeline installation, and reseeded of the disturbed areas will be completed during the first appropriate planting period following soil material replacement.

19RT Mine Dewatering Borehole and Pipeline (TR10-73)

In order to dewater the sealed mine workings in the completed Northern Mining District (NMD), TC plans to complete a nominal 17-inch diameter dewatering borehole to a depth of approximately 1,700 feet. A downhole pump, capable of pumping up to 550 gpm, will transfer water from a sump in the sealed NMD mine workings to the surface, where a buried 6,200-foot 12.5-inch diameter pipeline will carry the water to the 6MN Mine Water Storage Reservoir. The proposed dewatering borehole has been located to intercept the 19-Right (19RT) mine entries, at the low point on the synclinal axis in the NMD. The selected borehole location is also near several existing ranch roads, for access. TC proposes to complete the 19RT Dewatering Borehole during the summer when the ground is dry. Given the

completed during the first appropriate planting period following soil material replacement. When no longer needed to support ongoing or future mining and related operations, the thickener underflow boreholes and associated pads and roads will be reclaimed by removing the surface manhole structures, plugging and sealing the boreholes consistent with State Engineer requirements, cutting-off the casings below ground level and placing a permanent marker, removing surfacing material from pads and roads, regrading the pads and road areas to blend with the surrounding terrain and reestablish drainage, replacing soil materials, and reseeding with the appropriate approved seed mix for the associated disturbance area(s). Pipelines will be abandoned in-place, with the ends of the pipelines cut-off and capped below grade.

16LT & 18LT Mine Water Transfer Pipelines (TR09-70, TR20-95) - As a limited, temporary, surface disturbance, construction of the 16LT & 18LT Mine Water Transfer Pipeline will have minimal impacts on surface water hydrology, relative to runoff and sediment contributions. It is anticipated that a maximum of 300 feet of pipeline trench will be open at any given time. Soil removal and windrowing from this limited pipeline construction area will create a shallow (approximately 1.0 -foot deep) depression that, along with the trench excavation, will tend to contain any runoff from direct precipitation, as well as any minor amounts of run-on from adjacent areas. Where pipeline construction approaches Fish Creek or minor ephemeral/intermittent drainages, the specific BMP's and general protective measures previously detailed for the 16LT & 18LT Pipeline and outlined for pipeline disturbances will be utilized to control surface runoff and sediment. Surface disturbance areas associated with pipeline construction will be reclaimed concurrently with ongoing pipeline construction, and regraded surface areas will be left in a roughened condition, to control runoff and erosion, until they can be seeded. As a very limited disturbance area (a maximum of approximately 300 ft x 40 ft, or 0.28 acres) the active pipeline construction areas meet the applicable criteria for a Small Area Exemption, and construction of full-scale drainage and sediment control structures is neither needed nor justified.

19RT Mine Dewatering Borehole and Pipeline (TR10-73) - During construction, and for the minor surface structures that will remain during mining, drainage and sediment control for the 19RT Mine Dewatering Borehole and Pipeline will be provided by Alternative Sediment Controls (ASC's) consisting of combined Best Management Practice (BMP) measures. BMP's for the construction activities include:

- Minimizing the area of surface disturbance
- Scheduling of construction activities during the dry summer period
- Placement of staked straw wattles downgradient of all surface disturbance areas to intercept any surface runoff and trap associated suspended solids
- Soil replacement and stabilization with either the standard rangeland or pastureland seed mixtures (as appropriate) in a timely manner following completion of construction activities

Construction-related surface disturbance will be limited to soil removal and windrowing from the pipeline trench alignments and stockpiling for the borehole pad area, excavation of the trenches and temporary stockpiling of excavated material adjacent to the trench, minor cut/fill grading to establish the borehole drill-pad, and excavation of temporary cuttings pits.

Where pipeline disturbance traverses steep slopes, additional staked straw wattles will be placed on-contour to limit overland flow following revegetation seeding. Drainage and sediment control for the associated minor surface structures (borehole surface casing and any manhole(s)) will also utilize BMP's including the vegetative filter provided by temporary vegetative stabilization, and berms and/or wattles, as appropriate. The pad for the 19RT Mine Dewatering Borehole installation has been designated as a Small Area Exemption (SAE), and the limited drainage from this small area (0.35 acres) will be controlled by staked straw wattles, and reclamation/stabilization of the pad area following well installation. Temporary drainage and sediment control measures will remain in-place until vegetation is sufficiently established to effectively control runoff, erosion, and sediment loss.

As relatively small isolated surface disturbances, the additional disturbance required to construct ditches and sedimentation ponds to intercept, route, and treat runoff from the dewatering borehole pad, is not warranted. Similarly, for the associated temporary linear pipeline disturbances, construction of ditches and ponds to control runoff is impractical. Runoff from these small disturbance areas will move downslope toward Fish Creek through areas of extensive natural vegetation, which will supplement the ASC's, effectively serving as a vegetative filter. The proposed BMP's have proven effective in controlling runoff and sedimentation from similar disturbances. Special design, construction, and operational measures have been incorporated in the design plans to assure that there will be no